

REMARKS

I. STATUS OF THE CLAIMS

Claims 1, 22, 26, 27 and 31-34 are amended herein. No new matter is being presented.

Claim 7 is canceled.

In view of the above, it is respectfully submitted that claims 1-6 and 8-34 are currently pending in this application.

II. REJECTION OF CLAIMS 1, 6, 12-20, 22-30 AND 34 UNDER 35 U.S.C. § 103(a) AS BEING UNPATENTABLE OVER HATAKEYAMA ET AL (U.S. PATENT 6,508,554) IN VIEW OF LAMBERT (U.S. PATENT 6,288,815)

Independent claim 1 specifically recites, amongst other novel features, "**a scrolling unit having spirally arranged cylinder lens cells which separate light beams into color beams**". Hatakeyama fails to disclose, teach or suggest these features.

Instead, Hatakeyama relates to a projection-type image display apparatus and teaches an apparatus having a light source 201 including three light sources 207-209, a rotating polygon 212 with a reflective surface 213, and an image display panel 204. See, for example, FIG. 2 of Hatakeyama.

In the Office Action, it appears the Examiner believes that the rotating polygon corresponds to the scrolling unit. See, for example, page 3 of the Office Action. However, as the Office Action points out at page 2, the three light sources each emit a light beam of a specific color, --namely blue (207), green (208), and red (209). See, for example, Hatakeyama at column 6, lines 39-61 and FIG. 2). Thus, the rotating polygon does not "**separate light into color beams**" as specifically recited in, for example, claim 1, because they are already separated.

Moreover, in the Office Action, the Examiner concedes that Hatakeyama fails to teach a scrolling unit having spirally arranged cylinder lens cells, as specifically recited by the Applicant in, for example, claim 1 of the present application.

However, Lambert fails to cure the deficiencies of Hatakeyama. Instead, Lambert relates to a light scanner with cylindrical lenses and teaches, in an alternative embodiment, an arrangement having a **dichroic cube** which separates white light into red, green, and blue rays, and a rotating lens (a disk) 32 to scroll the color beams. See, for example, FIGS. 2 and 7A-7C,

and column 11, lines 1-21 of the disclosure of Lambert. Further, white light beam emitted from the light source portion 901 is led to the color separation optical system 907 by the illuminating device 903 wherein a red light beam in the incident light is reflected by the red-reflecting dichroic mirror 904 placed obliquely with respect to the incident light so as to travel along an optical axis 909; a green light beam in the light transmitted by the red-reflecting dichroic mirror 904 is reflected by the green-reflecting dichroic mirror 905 placed obliquely with respect to the incident light so as to travel along an optical axis 910; and a blue light beam transmitted by the green-reflecting dichroic mirror 905 enters the reflection mirror 906, and is then reflected so as to travel along an optical axis 911.

In the Office Action, it appears that the Examiner believes that the rotating lens corresponds to "a scrolling unit" as specifically recited by Applicant in, for example, claim 1. See, for example, Office Action at page 3. However, even assuming *arguendo* that this characterization is correct, **absent from Lambert is any teaching or suggestion of how rotating lens separates emitted light into color beams**. Instead, Lambert expressly teaches that the dichroic cube performs this function. Therefore, it is respectfully submitted that Lambert fails to disclose, teach or suggest Applicant's invention as specifically recited in, for example, claim 1 that requires "a scrolling unit having spirally arranged cylinder lens cells which **separate light beams into color beams**". Further understanding and appreciation of Applicant's claimed invention would be found in, for example, FIG. 4 and pages 7 and 8, paragraphs [0028]-[0029] of the specification of the present application.

Further, claim 1 as amended specifically recites "**optical fibers** disposed between the light emitting units and the collimating lens to respectively **transmit the light beams**". Hatakeyama and Lambert, either singularly or in combination, fail to disclose, teach or suggest these features.

Therefore, it would **not** have been obvious to a person of ordinary skill in the art at the time of the invention of this present application to combine Hatakeyama and Lambert to achieve Applicant's invention as specifically recited in, for example, claim 1. Applicants respectfully submit that independent claim 1 patentably defines the present invention over the citations of record.

In view of the above, it is respectfully submitted that the rejection is overcome.

Although the above comments are specifically directed to claim 1, it is respectfully submitted that the comments would be helpful in understanding differences in claims 6, 12-20, 22-30 and 34 over the cited references.

III. REJECTION OF CLAIMS 2-5, 7-11, 21 AND 31-33 UNDER 35 U.S.C. § 103(a) AS BEING UNPATENTABLE OVER HATAKEYAMA ET AL (U.S. PATENT 6,508,554) IN VIEW OF LAMBERT (U.S. PATENT 6,288,815), AND FURTHER IN VIEW OF KRUSCHWITZ ET AL (U.S. PATENT 6,594,090)

The above comments for distinguishing over Hatakeyama and Lambert also apply here, where appropriate.

Moreover, independent claims 31-33 as amended specifically recite, amongst other novel features, "**optical fibers disposed between the light emitting units and the collimating lens** to respectively transmit the light beams". Hatakeyama, Lambert and Kruschwitz, either singularly or in combination, fail to disclose, teach or suggest these features. Further, nothing was found in Kruschwitz suggesting modification of Hatakeyama and Lambert to overcome the deficiencies discussed above.

Instead, Kruschwitz relates to laser projection display apparatus having means for reducing the appearance of coherence-induced artifacts and speckle in the display wherein the laser 20 can be, for example, a fiber laser. See, for example, FIG.1, column 1, lines 5-9 and column 4, lines 28-33 of the disclosure of Kruschwitz. However, Kruschwitz fails to disclose, teach or suggest "**optical fibers disposed between the light emitting units and the collimating lens** to respectively transmit the light beams", as specifically recited in, for example, independent claims 31-33. Therefore, it is respectfully submitted that claims 31-33 patentably distinguish over Hatakeyama, Lambert and Kruschwitz, either singularly or in combination.

Also, since claims 2-5, 8-11 and 21 depend from independent claim 1, it is submitted that claims 2-5, 8-11 and 21 patentably distinguish over Hatakeyama, Lambert and Kruschwitz, either singularly or in combination.

In view of the above, it is respectfully submitted that the rejection is overcome.

IV. CONCLUSION

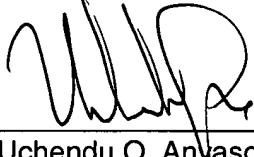
There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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